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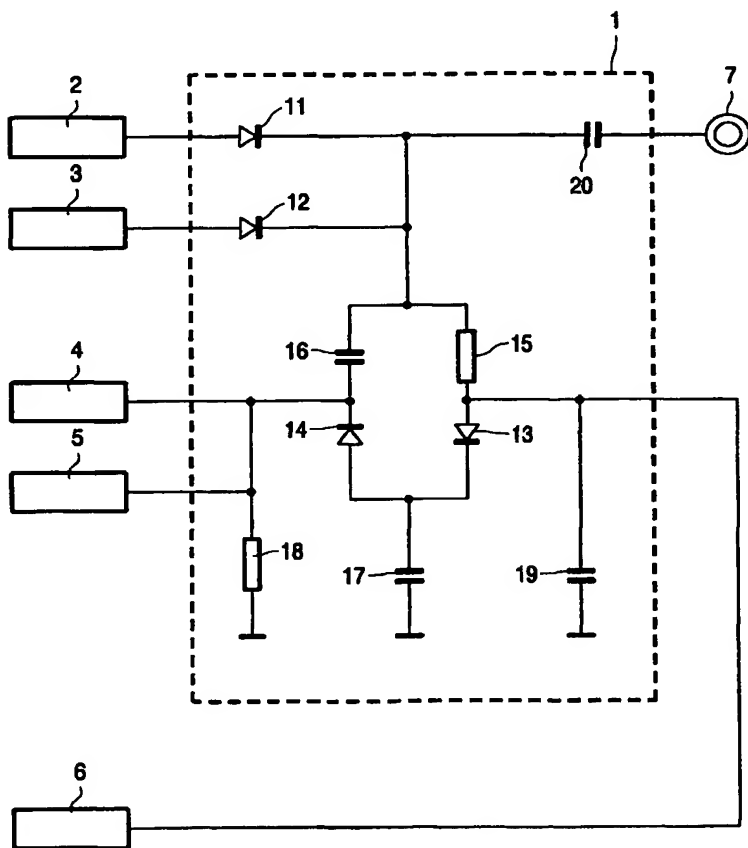
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(54) Title: TRANSMIT AND RECEIVE ANTENNA SWITCH



(57) Abstract: Antenna switches (1,10) in dual-band or multi-band mobile phones are according to a basic idea provided with a serial semiconductor switch (11,21,12,22) per transmitting branch (2,3) and with a further semiconductor switch (13,23) coupled in parallel to a receiving branch (4,5,6), to obtain isolation between branches (2-6) in a simple way. Said semiconductor switches are PIN diodes or MEMS switches or pHEMT switches. Another semiconductor switch (14) coupled in parallel to the receiving branches (4-6) allows together with said further semiconductor (13) the introduction of elements (15,16) without a transmission line. Alternatively, the antenna switch (1,10) may comprise a transmission line (24,25), in which case the receiving branches (4,5,6) can be switched via transistor switches (26,27,28). This all improves isolation, reduces costs, complexity, size and high Radio-Frequency (RF) losses.

WO 2004/036778 A1



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